

# TOSHIBA

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## Qosmio® F45-AV412

### High Definition Meets High Impact.

The Qosmio F45 is your luxe mobile digital entertainment notebook with a 15.4" diagonal widescreen for your high definition movies, high fidelity audio and high impact gaming. Now with an HD DVD-ROM<sup>9</sup>, you have a variety of media at your fingertips. Intel® Centrino® Duo processor technology increases system responsiveness, makes multi-tasking faster, and extends battery life. New wireless 802.11ag<sup>3</sup> and draft "n"<sup>4</sup> Wi-Fi® provides reliable connections that won't slow you down.



Toshiba recommends Windows Vista™ Ultimate.



# Qosmio® F45-AV412

## System Characteristics<sup>1</sup>

### Part Number and UPC

- Part Number: PQF43U-008004
- UPC: 032017912496

### Operating System

- Genuine Windows Vista™ Ultimate [32-bit version]

### Processor and Chipset<sup>2</sup>

#### Intel® Centrino® Duo processor technology featuring:

- Intel® Core™ 2 Duo Processor T7100  
-1.80GHz, 2MB L2, 800MHz FSB with 64-bit<sup>3</sup>
- Mobile Intel® PM965 Express Chipset
- Intel® Wireless WiFi Link 4965AGN [802.11a/g/n]<sup>4,5</sup>

### Memory<sup>6</sup>

- Configured with 2048MB PC2-5300 DDR2 SDRAM (both memory slots may be occupied). Maximum capacity 4096MB
- Intel® Turbo Memory  
-1024MB

### Hard Disk Drive<sup>7</sup>

- 250GB [4200 RPM] Serial ATA hard disk drive

### Fixed Optical Disk Drive<sup>8</sup>

- HD DVD-ROM/DVD<sup>9</sup> SuperMulti [+/- double layer] drive (in one optical drive), supporting 12 formats  
-Maximum speed and compatibility: HD DVD-ROM [1x], CD-ROM [24x], CD-R [24x], CD-RW [10x], DVD-ROM [8x], DVD-R [4x], DVD+R [4x], DVD-RW [4x], DVD+R [Double Layer [2.4x]], DVD-R [Double Layer [2x]], DVD+RW [4x], DVD-RAM [3x]

### Display<sup>10</sup>

- 15.4" diagonal widescreen TruBrite® TFT active-matrix LCD display at 1280x800 native resolution (WXGA)  
-Maximum Brightness – up to 200 Cd/m<sup>2</sup>  
-Contrast Ratio: 300:1  
-Horizontal Viewing Angle: 120 Degree  
-Vertical Viewing Angle: 100 Degree

### Graphics<sup>11</sup>

- Mobile Intel® Graphics Media Accelerator X3100 with 8MB-256MB dynamically allocated shared graphics memory

### Sound

- Two built-in harman/kardon® stereo speakers with subwoofer
- Sound Volume Control Dial
- Built-in microphone

### Input Devices

- 86 key US keyboard
- TouchPad™ pointing device
- TouchPad™ Enable/Disable
- Control Buttons:  
-Internet button to launch default browser  
-CD/DVD control buttons (Play/Pause, Stop, Prev Track, Next Track)

### Communications

- Webcam and microphone built into LCD bezel
- Modem<sup>12</sup>
- 10/100 Ethernet
- Intel® Wireless WiFi Link 4965AGN [802.11a/g/n]<sup>4,5</sup>

### Expandability

- 2 main memory slots. Both slots may be occupied.
- ExpressCard™ slot (ExpressCard/34 and Express Card/54)
- 5-in-1 Bridge Media Adapter  
-Secure Digital, Memory Stick™, Memory Stick PRO™, MultiMedia Card, xD Picture Card [shared slots]

### Ports

- Video  
-RGB (monitor) output port  
-S-Video output port
- Audio  
-S/P DIF output port  
-Microphone input port  
-Headphone output port
- Data  
-i.LINK™ IEEE-1394  
-USB v2.0 – 4 ports
- Security  
-Fingerprint reader

### Physical Description

- Dimensions [WxDxH Front/H Rear]: 14.9" x 11.0" x 1.50" /1.77" without feet
- Weight: Starting at 6.6 lbs depending upon configuration<sup>13</sup>
- LCD Cover Color: Cosmic Black

### Power Supply

- 90W [19V x 4.74A] 100-240V AC Adapter
- Dimensions [WxDxH]: 5.24" x 1.21" x 2.28"
- Weight: starting at 0.89 lb

### Battery<sup>14</sup>

- 4000mAh Lithium Ion battery pack
- Dimensions [WxDxH]: 4.72" x 3.31" x 1.06"
- Weight: starting at 0.73 lb

### Software<sup>15</sup>

- Toshiba Software and Utilities  
-TOSHIBA Value Added Package  
-Electronic User's Guide  
-Bluetooth Stack for Windows by Toshiba  
-TOSHIBA ConfigFree®  
-TOSHIBA Assist  
-TOSHIBA Security Assist  
-TOSHIBA Disc Creator  
-TOSHIBA Extended Tiles for Windows Mobility Center  
-TOSHIBA HD DVD Player  
-TOSHIBA Speech System  
-TOSHIBA Remote Control Manager
- Third-party Software  
-TOSHIBA Game Console  
-Microsoft Works Version 8.5  
-Sun® Java™ 2 Runtime Environment  
-Adobe® Acrobat® Reader 8.0  
-Google™ Desktop  
-Google™ Toolbar  
-Google Picasa™  
-Yahoo! Music™ Jukebox  
-Infiniteon TPM Software Professional Package 3.0  
-Ulead® DVD MovieFactory® 5 for TOSHIBA
- Trial Software  
-Microsoft Office Trial Home and Student 2007 Edition [60-day trial]  
-McAfee® Internet Security Suite [30-day trial]
- Special Offers  
-Microsoft Office Live  
-Shutterfly digital photo service  
-Napster® music subscription service  
-eMusic MP3 music subscription service  
-VONGO<sup>SM</sup> internet video download service  
-ebay®  
-CNN Pipeline  
-Skype internet communications

### Limited Warranty<sup>16</sup>

- 1 Year Standard Limited Warranty

## Accessories

### Memory Upgrade

- PA3512U-1M1G Toshiba 1GB DDR2-667 Memory Module
- PA3513U-1M2G Toshiba 2GB DDR2-667 Memory Module

### Power

- PA3290U-3ACA Toshiba 120W Global AC Adapter
- PA3609U-1BRS Toshiba Primary Li Ion Battery Pack (6 Cell)

### Expansion

- PA3541U-2PRP Toshiba dynadock™ USB Docking Station with VGA port
- PA3542U-2PRP Toshiba dynadock USB Docking Station with DVI port

### Security & Protection

- PA3567U-1ETC Toshiba Keyboard Protector
- PA410U Targus DEFCON CL Cable Lock

### Storage

- PA3109U-3FDD Toshiba USB Floppy Disk Drive
- PA1411U-1M1G Toshiba 1GB USB Hi-Speed Flash Drive
- PA1412U-1M2G Toshiba 2GB USB Hi-Speed Flash Drive

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<sup>1</sup> The product specifications and configuration information are designed for a product Series. Your particular model may not have all the features and specifications listed or illustrated. For more detailed information about the features and specifications on your particular model, please visit Toshiba's Web site at pcsupport.toshiba.com. Toshiba America Information Systems, Inc. reserves the right to modify or withdraw this offer at anytime without notice.<sup>2</sup> CPU performance may vary. See Processor Legal Footnote at www.info.toshiba.com. Intel® Dual Core Technology is a new technology designed to deliver improved performance to the notebook PC. Performance or compatibility may vary. For more information on Intel's Core 2 Duo processors, visit: http://www.intel.com/core2duo/3 64-bit processors are designed to take advantage of 32 and 64 bit computing. 64-bit computing requires that the following hardware and software requirements are met: 64-bit Operating System, 64-bit CPU, Chipset and BIOS (Basic Input/Output System), 64-bit Device drivers, 64-bit applications. Certain device drivers and/or applications may not be compatible with a 64-bit CPU and therefore may not function properly. A 32-bit version of the operating system is preinstalled on your computer unless explicitly stated that the operating system is 64-bit. See "Detailed Specs" for more information.<sup>4</sup> May require purchase of additional software, external hardware, or services. Transmission speeds may vary. See Wireless Legal Footnote at www.info.toshiba.com.<sup>5</sup> The Intel® Wireless Wi-Fi® Link 4965AGN [802.11a/g/n] adapter is based on a draft "n" release version of the IEEE 802.11n specification, also known as "Draft N", which may not be compatible with, or support all features (e.g., security) of, certain Wi-Fi® equipment. Based on the theoretical bandwidth maximum enabled by 2x3 Draft-N implementations with 2 spatial streams. Actual wireless throughput and/or range will vary depending on your specific operating system, hardware and software configurations. Compatible wireless access point required. http://www.intel.com/network/connectivity/resources/doc\_library/tech\_brief/316286.pdf<sup>6</sup> Memory size may vary. See Memory Legal Footnote at www.info.toshiba.com.<sup>7</sup> Hard drive capacity may vary. 1 Gigabyte (GB) means 109 = 1,000,000,000 bytes using powers of 10. See Hard Disk Drive Capacity Legal Footnote at www.info.toshiba.com.<sup>8</sup> Copy protection technology may prevent or limit recording or viewing of certain optical media (e.g., CD or DVD).<sup>9</sup> Because HD DVD is a new format that makes use of new technologies, certain disc, digital connection and other compatibility and/or performance issues are possible. Advanced interactive and navigation features of the HD DVD Video format including, but not limited to, Picture in Picture (PIP) and network streaming features are not supported by this product. HD DVD Application Logo (HD DVD-ROM) represents the optical drive's conformity with the DVD Forum's verification criteria for HD DVD physical format, and does not represent compliance with the HD DVD Video specification defined by the DVD Forum. Advanced Access Content System (AACS) keys are integrated into your computer for copy protection purposes. Occasional renewal of the AACS key is required, and easily done by connecting to the Internet. AACS key renewal will be provided at no charge to purchasers. If the AACS key is not renewed, the HD DVD player software will stop playing AACS-protected HD DVD content. However, it will continue to play other forms of content, such as DVD discs or non-protected HD DVD content. For more information on AACS key, visit www.aacsla.com/home.<sup>10</sup> Small bright dots may appear on your screen display when you turn on your PC. Your display contains an extremely large number of thin-film transistors (TFT) and is manufactured using high-precision technology. Any small bright dots that may appear on your display are an intrinsic characteristic of the TFT manufacturing technology. Over a period of time, and depending on the usage of the computer, the brightness of the screen will deteriorate. This is also an intrinsic characteristic of the screen technology. When the computer is operated on battery power, the screen with dim and you may not be able to increase the brightness of the screen while on battery power.<sup>11</sup> GPU performance may vary. See Graphics Legal Footnote at www.info.toshiba.com. <sup>12</sup> Due to FCC limitations, speeds of 53 kbps are the maximum permissible transmission rates during download. Actual data transmission speeds will vary depending on line conditions.<sup>13</sup> Weight may vary. See Weight Legal Footnote at www.info.toshiba.com.<sup>14</sup> Battery life may vary. See Battery Life Legal Footnote at www.info.toshiba.com.<sup>15</sup> Some software may differ from its retail version (if available), and may not include user manuals or all program functionality. Internet access is required to enable certain functionality of certain Microsoft products which may be included with your computer. The Microsoft Office 2007 60-Day Trial software (if applicable) is intended for evaluation purposes only. You must activate the software before you can use it. Product activation procedures will be detailed during initial launch of the software; activation requires Internet access. This software has an expiration date of 60 days from date of first use, at which time the software will operate under reduced-functionality mode, limiting end-user options and operations. The Microsoft Office 2007 60-Day Trial software is distributed without charge to the End User Customer but if the End User wants to continue to use such product after the trial period, then the End User Customer will have to pay a fee for the perpetual version of such Office Product. For systems with Microsoft Money Essentials 2007 installed, note that some online services for Microsoft® Money 2007 and Microsoft® Money 2007 Essentials will expire on the earlier of two years after your activation of the software or September 1, 2009. Also, you may need to get some online services separately from your financial institution, which may charge a fee. See the online services policy at http://money.msn.com/Money/2007/OSP.asp. <sup>16</sup> The terms and conditions of Toshiba's standard limited warranty are available at www.info.toshiba.com.